

Abstract

A pixel comprises a light receiving portion for generating an electric signal corresponding to intensity of received light, an amplifying portion for amplifying an output signal of the light receiving portion, a plurality of storing portions for storing as a current signal an electric signal amplified by the amplifying portion, a load portion for converting current outputs of the plurality of storing portions into voltages, a bias portion for supplying an offset current to an input of the load portion, and a calculating portion for calculating an output of the load portion. Such pixels are arranged in a matrix shape. The storing portion and the photographing device are disposed on the same circuit. Thus, the process is speeded up. In addition, with a bias, the output becomes stable.